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CLAIMS

- 1. A method for sequencing a polynucleotide, comprising the steps of:
 - (i) reacting a target polynucleotide with a helicase/primase enzyme, under conditions suitable for enzyme activity; and
 - (ii) detecting the interaction between the enzyme and a nucleotide on the target, by measuring radiation.
- 2. A method according to claim 1, wherein the radiation is electromagnetic.
- 3. A method according to claim 1 or claim 2, wherein step (ii) comprises using surface plasmon resonance.
- 10 4. A method according to claim 1 or claim 2, wherein step (ii) comprises using nuclear magnetic resonance.
 - 5. A method according to any preceding claim, wherein the enzyme is immobilised on a solid support.
 - 6. A sensor chip comprising a helicase/primase enzyme immobilised thereon.

